

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A bone-powder-impregnated, porous structure comprising a porous matrix made of a biocompatible material impregnated with fine bone powder obtained by pulverizing living bones and/or teeth.

2. (Original) The bone-powder-impregnated, porous structure according to claim 1, wherein it has fine communicating pores having an average diameter of 0.005-50 μm in its entire body, said fine communicating pores being open on an outer surface of said porous structure at a density of 1 or more per an area of 50 $\mu\text{m} \times 50 \mu\text{m}$.

3. (Original) The bone-powder-impregnated, porous structure according to claim 1, wherein it has communicating macro-pores having an average diameter of 100-1000 μm in its entire body, which are open on an outer surface of said porous structure at a density of 1 or more per an area of 1000 $\mu\text{m} \times 1000 \mu\text{m}$, and fine communicating pores having an average diameter of 0.005-50 μm , which are open on inner walls of said

communicating macro-pores at a density of 1 or more per an area of 50 µm x 50 µm.

4. (Original) The bone-powder-impregnated, porous structure according to claim 1, wherein it has communicating macro-pores having an average diameter of 100-1000 µm in its entire body, which are open on an outer surface of said porous structure at a density of 1 or more per an area of 1000 µm x 1000 µm, and fine recesses having an average diameter of 0.005-50 µm and an average depth of 0.005-50 µm, which are open on inner walls of said communicating macro-pores at a density of 1 or more per an area of 50 µm x 50 µm.

5. (Currently Amended) The bone-powder-impregnated, porous structure according to claim 1 any one of claims 1-4, wherein said biocompatible material is at least one selected from the group consisting of ceramics, metals, and polymers.

6. (Original) The bone-powder-impregnated, porous structure according to claim 5, wherein said ceramics are calcium phosphate ceramics.

Claims 7 and 8 (Cancelled)

9. (Currently Amended) The bone-powder-impregnated, porous structure according to claim 1 ~~any one of claims 1-8~~, wherein said fine bone powder has an average diameter of 50 μm or less.

10. (Currently Amended) The bone-powder-impregnated, porous structure according to claim 1 ~~any one of claims 1-9~~, wherein the entire structure is porous.

11. (Currently Amended) The bone-powder-impregnated, porous structure according to claim 1 ~~any one of claims 1-9~~, wherein only a surface layer of said structure is porous.

12. (Currently Amended) A method for producing a bone-powder-impregnated, porous structure comprising a porous matrix made of a biocompatible material impregnated with fine bone powder, said method ~~the bone powder-impregnated, porous structure recited in any one of claims 1-11~~, comprising the steps of preparing said fine bone powder, and impregnating said porous structure with said fine bone powder.

13. (Original) The method for producing a bone-powder-impregnated, porous structure according to claim 12, wherein said porous structure is impregnated with fine bone powder in the form of a suspension.

14. (Original) An artificial bone comprising the bone-powder-impregnated, porous structure recited in claim 10.

15. (Original) An artificial bone comprising the bone-powder-impregnated, porous structure recited in claim 11.

16. (Original) An artificial dental root comprising the bone-powder-impregnated, porous structure recited in claim 11

17. (Currently Amended) A bone-powder-impregnated, surface-roughened structure comprising a surface-roughened matrix made of a biocompatible material, which is impregnated with fine bone powder obtained by pulverizing living bones and/or teeth.

18. (Original) The bone-powder-impregnated, surface-roughened structure according to claim 17, wherein said surface-roughened structure has fine recesses having an average diameter of 0.005-50 μm and an average depth of 0.005-50 μm , which are open on its entire outer surface at a density of 1 or more per an area of 50 $\mu\text{m} \times 50 \mu\text{m}$.

19. (Currently Amended) The bone-powder-impregnated, surface-roughened structure according to claim 17 or 18, wherein said

biocompatible material is at least one selected from the group consisting of ceramics, metals, and polymers.

Claims 20 and 21 (Cancelled)

22. (Currently Amended) The bone-powder-impregnated, surface-roughened structure according to claim 17 ~~any one of claims 17-21~~, wherein said fine bone powder has an average diameter of 50 µm or less.

23. (Currently Amended) A method for producing a bone-powder-impregnated, surface-roughened structure comprising a surface-roughened matrix made of a biocompatible material, which is impregnated with fine bone powder, ~~said method the bone-powder-impregnated, surface-roughened structure recited in any one of claims 17-22~~, comprising the steps of preparing said fine bone powder, and impregnating said surface-roughened structure with said fine bone powder.

24. (Original) The method for producing a bone-powder-impregnated, surface-roughened structure according to claim 23, wherein a rough surface of said surface-roughened structure is impregnated with fine bone powder in the form of a suspension.

25. (Currently Amended) An artificial bone comprising the bone-powder-impregnated, surface-roughened structure recited in claim 17 ~~any one of claims 17-22.~~

26. (Currently Amended) An artificial dental root comprising the bone-powder-impregnated, surface-roughened structure recited in claim 17 ~~any one of claims 17-22.~~